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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,589	04/14/2004	Jere Wade	251613US8X	6214
22850	7590	11/02/2005	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			LE, THANH TAM T	
			ART UNIT	PAPER NUMBER
			2839	

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/823,589

Applicant(s)

WADE ET AL.

Examiner

Thanh-Tam T. Le

Art Unit

2839

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 11-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9/9/05.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. The Allowable Subject Matter sent 05/13/05 has been withdrawn.

### ***Claim Objections***

2. Claim 9 is objected to because of the following informalities:

Claim 9, line 9, "overcurrent" should be -- over current --.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-10 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Shibata et al. (6,007,355).

Shibata, figures 4 and 5, show a rotary connector comprising:

- a first part (not labeled);
- a second part (not labeled) rotationally coupled to the first part to form an interior of the rotary connector;
- a first flat cable (4) having a single ribbon conductor;

- a second flat cable (5) having multiple conductor wires (not labeled), wherein the first and second flat cables are housed within the interior of the rotary connector; and
- an over current protection device (10) housed within an integral space of the rotary connector and configured to provide over current protection for the first flat cable.

Regarding claim 2, the over current protection device consists of a single fuse (15) configured to provide over current protection for the first flat cable.

Regarding claim 3, the first flat cable comprising a high current capacity single conductor ribbon cable.

Regarding claim 4, the integral space comprising a recess (not labeled) formed in the interior of the rotary connector.

Regarding claim 5, the recess is separate from an annular space in the interior used to house the first and second flat cables.

Regarding claim 6, the over current protection device snaps into the recess.

Regarding claim 7, a bus bar 11b1 (figure 5) coupled to the first and second flat cables, the over current protection being integrated with the bus bar.

Regarding claim 8, the over current protection consists of a single fuse configured to provide over current protection for the first flat cable.

Regarding claim 9, Shibata et al., figures 4 and 5 show a rotary connector comprising:

- a first part (not labeled);

- a second part (not labeled) rotationally coupled to the first part to form an interior of the rotary connector;
- an electrical cable (4) housed within the interior of the rotary connector;
- an over current protection device (10) housed within an integral space of the rotary connector and configured to provide over current protection for the electrical cable; and
- a bus bar (11) coupled to the electrical cable, the over current protection being a single fuse and being integrated with the bus bar, wherein the bus bar comprising a first conductor (11b1) electrically connected to the electrical cable and a second conductor (11b3) electrically insulated from the first conductor and configured to be connected to a power input to the rotary connector, and wherein the over current protection device electrically connects the first and second conductors.

Regarding claim 10, the over current protection device comprising a blade fuse (column 6, lines 37-45), the rotary connector further comprising a intermediate terminals (5) connected to the first and second conductors and configured to electrically connect with the blade fuse.

Regarding claim 22, the first flat cable provide with over current protection is the first flat cable, which is configured to provide input and output high current to the rotary connector.

***Response to Arguments***

5. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh-Tam T. Le whose telephone number is 571-272-2094. The examiner can normally be reached on 7:30-5:00.

7. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TC Patel can be reached on 571-272-2098. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thanh-Tam T. Le  
Primary Examiner  
Art Unit 2839

TL.  
10/29/05.